## THE UNITED STATES PATENT AND TRADEMARK OFFICE

 $oldsymbol{\omega}$ 

In re Application of:

Yoon, et al.

Serial No.: 10/074,898

Confirmation No.: Unknown

Filed:

February 11, 2002

For:

Deposition of Tungsten

**Films** 

**Assistant Commissioner for Patents** Washington, D.C. 20231

Dear Sir:

Group Art Unit: Unknown

Examiner:

Unknown

CERTIFICATE OF MAILING

37 CFR 1.8

I hereby certify that this correspondence is being deposited on June \_\_\_\_\_\_, 2002 with the United States Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

lac 02

Sionature

## INFORMATION DISCLOSURE STATEMENT

The Applicants, and the Attorney who signs below on the basis of the information supplied by the inventor and the information in his file, submit herewith patents, publications, or other information of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

While the information submitted in this Information Disclosure Statement may be material pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication, or other information referred to therein is prior art for this invention unless specifically designated as such.

In accordance with 37 CFR § 1.97, this Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information as defined under 37 CFR § 1.56(a) exists.

The patents and/or publications submitted herewith are set forth on the attached Form PTO-1449.

If the sum of \$180.00 is due under 37 CFR § 1.17(p) pursuant to § 1.97, the Commissioner is hereby authorized to charge this fee, and any other fee necessary to make this submission timely, to the Deposit Account No. 20-0782/APPM/6473/BTP.

Respectfully submitted,

William B. Patterson

Registration No. 34,102

MOSER, PATTERSON & SHERIDAN, L.L.P.

3040 Post Oak Blvd., Suite 1500

Houston, TX 77056

Telephone: (713) 623-4844 Facsimile: (713) 623-4846 Attorney for Applicant(s)

IIS Depart	ment of	Commerce, Pate	nt and Tradema	rk Office	Docket No.		Serial No.
(PTO Form					APPM/6473	3	10/074,898
		LIST OF PATENT	S AND PUBLIC	CATIONS	Applicant		Confirmation No.:
CITED BY			/	SIPE	Yoon, et al.		Unknown
				50		· · · · · · · · · · · · · · · · · · ·	
(Use severa		s if necessary)	<u></u>	N 1 1 2002	Filing Date	4 0000	Group
		Examiner Unkn	own A	Applicant(s)	February 1	1, 2002	Unknown
U.S. Paten	t Docun	nents	-	RADEMARIA			EW - D-4-16
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
	A1	4,058,430	11/15/77	Suntola et al.	156	611	11/25/75
	A2	4,389,973	6/28/83	Suntola et al.	118	725	12/11/81
	A3	4,413,022	11/1/83	Suntola et al.	427	255.2	6/21/79
	A4	4,486,487	12/4/84	Skarp	428	216	4/25/83
	A5	4,767,494	8/30/88	Kobayashi et al	1. 156	606	9/19/86
	A6	4,806,321	2/21/89	Nishizawa et al	. 422	245	7/21/85
	A7	4,813,846	3/21/89	Helms	414	744.1	4/29/87
	A8	4,829,022	5/9/89	Kobayashi et al	I. 437	107	12/9/86
	A9	4,834,831	5/30/89	Nishizawa et al	. 156	611	9/4/87
	A10	4,838,983	6/13/89	Schumaker et al.	156	613	3/18/88
	<b>3</b> 11	4,838,993	6/13/89	Aoki et al.	156	643	12/3/87
;	<b>%</b> 12	4,840,921	6/20/89	Matsumoto	437	89	6/30/88
ED 200	A13	4,845,049	7/4/89	Sunakawa	437	81	3/28/88
Z :		4,859,625	8/22/89	Nishizawa et al	I. 437	81	11/20/87
<del>- 111</del>	4A15	4,859,627	8/22/89	Sunakawa	437	81	7/1/88
吊	A16	4,861,417	8/29/89	Mochizuki et al	. 156	610	3/24/88
	A17出	4,876,218	10/24/89	Pessa et al.	437	107	9/26/88
	A18	4,917,556	4/17/90	Stark et al.	414	217	5/26/89
<u>.</u>	A19	4,927,670	5/22/90	Erbil	427	255.3	6/22/88
	A20	4,931,132	6/5/90	Aspnes et al.	156	601	10/7/88
	A21	4,951,601	8/28/90	Maydan, et al.	118	719	6/23/89
	A22	4,960,720	10/2/90	Shimbo	437	105	8/24/87
	A23	4,975,252	12/4/90	Nishizawa et a	I. 422	245	5/26/89
	A24	4,993,357	2/19/91	Scholz	118	715	12/21/89
	A25	5,000,113	3/19/91	Wang et al.	118	723	12/19/86
	A26	5,013,683	5/7/91	Petroff et al.	437	110	1/23/89
Examiner				1	Date Cons	sidered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.



U.S. Depar	tment o	f Commerce, Pate	ent and Trad	emark Office	Docket No.		Serial No.
(PTO Form	1449 n	nodified)		-	APPM/647	3	10/074,898
		LIST OF PATEN	S AND PUI		Applicant	RECE	(enfi)rmation No
CITED BY	APPLIC	JANI		OIPE TO	Yoon, et al	JUN 14	Maknown
(Use sever	al sheet	s if necessary)		and mar w	Filing Date	TNOLUGY CE	Group
		Examiner Unkr	iown 🖁	Applicant(s)	February 1	1, 2002	Unknown
U.S. Paten	t Docui	ments		RADEMARI		· .	, <u></u>
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
	A27	5,028,565	7/2/91	Chang, et al.	437	192	8/25/89
	A28	5,082,798	1/21/92	Arimoto	437	108	9/27/90
	A29	5,085,885	2/4/92	Foley et al.	477	38	9/10/90
	A30	5,091,320	2/25/92	Aspnes et al.	437	8	6/15/90
	A31	5,130,269	7/14/92	Kitahara et al.	437	111	4/25/89
<u> </u>	A32	5,166,092	11/24/92	Mochizuki et al	. 437	105	10/30/90
	A33	5,173,474	12/22/92	Connell, et al.	505	1	3/11/91
	A34	5,186,718	2/16/93	Tepman et al.	29	25.01	4/15/91
	A35	5,205,077	4/27/93	Wittstock	51	165 R	8/28/91
	A36	5,225,366	7/6/93	Yoder	437	108	6/22/90
	A37	5,234,561	8/10/93	Randhawa et a	ıl. 204	192.38	8/25/88
47.4	A38	5,246,536	9/21/93	Nishizawa et a	I. 156	610	3/10/89
N=-	A39	5,250,148	10/5/93	Nishizawa et a	I. 156	611	11/12/91
	A40	5,254,207	10/19/93	Nishizawa et a	I. 156	601	11/30/92
	A41	5,256,244	10/26/93	3 Ackerman	156	613	2/10/92
	A42	5,259,881	11/9/93	Edwards, et al.	118	719	5/17/91
	A43	5,270,247	12/14/93	Sakuma et al.	437	133	7/8/92
	A44	5,278,435	1/11/94	Van Hove et al	. 257	184	6/8/92
	A45	5,281,274	1/25/94	Yoder	118	697	2/4/93
	A46	5,286,296	2/15/94	Sato et al.	118	719	1/9/92
	A47	5,290,748	3/1/94	Knuuttila et al.	502	228	7/16/92
	A48	5,294,286	3/15/94	Nishizawa et a	I. 156	610	1/12/93
	A49	5,296,403	3/22/94	Nishizawa et a	I. 437	133	10/23/92
	A50	5,300,186	4/5/94	Kitahara et al.	156	613	4/7/92
•	A51	5,311,055	5/10/94	Goodman et al	. 257	593	11/22/91
	A52	5,316,615	5/31/94	Copel	117	95	3/9/93
Examiner	1	<u> </u>			Date Cons	idered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.



		of Commerce, Pa	tent and Trader	nark Office	Docket No	o. '	Serial No.
(PTO Forn					APPM/64	4.7	10/074,898
SUPPLEM CITED BY	ENTAI APPLI	LIST OF PATE			Applicant	IAFD	Confirmation No
				OTPE COS	Yoogunt	4 2002	Unknown
(Use sever	al shee	ets if necessary)		1 2002 H	E Eiling Date	eCEATER 28	Group
		Examiner Unl	known	7011	February	11, 2002	Unknown
U.S. Pater	t Docu	ments		Applicant(s)	ست جافری		About
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
	A53	5,316,793	5/31/94	Wallace et al.	427	248.1	7/27/92
77.00	A54	5,330,610	7/19/94	Eres et al.	117	86	5/28/93
	A55	5,336,324	8/9/94	Stall et al.	118	719	12/4/91
	A56	5,338,389	8/16/94	Nishizawa et al.	117	89	4/21/93
	A57	5,348,911	9/20/94	Jurgensen et al.	117	91	4/26/93
	A58	5,374,570	12/20/94	Nasu et al.	437	40	8/19/93
	A59	5,395,791	3/7/95	Cheng et al.	437	105	10/20/93
	A60	5,438,952	8/8/95	Otsuka	117	84	1/31/94
	A61	5,439,876	8/8/95	Graf et al.	505	447	8/16/93
	A62	5,441,703	8/15/95	Jurgensen	422	129	3/29/94
·	A63	5,443,033	8/22/95	Nishizawa et al.	117	86	3/11/94
	A64	5,443,647	8/22/95	Aucoin et al.	118	723 ME	7/11/94
	A65	5,455,072	10/3/95	Bension et al.	427	255.7	11/18/92
	A66	5,458,084	10/17/95	Thorne et al.	117	89	12/9/93
	A67	5,469,806	11/28/95	Mochizuki et al.	117	97	8/20/93
**	A68	5,480,818	1/2/96	Matsumoto et al.	437	40	2/9/93
	A69	5,483,919	1/16/96	Yokoyama et al.	117	89	8/17/94
	A70	5,484,664	1/16/96	Kitahara et al.	428	641	1/21/94
	A71	5,503,875	4/2/96	Imai et al.	427	255.3	3/17/94
	A72	5,521,126	5/28/96	Okamura et al.	437	235	6/22/94
	A73	5,527,733	6/18/96	Nishizawa et al.	437	160	2/18/94
	A74	5,532,511	7/2/96	Nishizawa et al.	257	627	3/23/95
	A75	5,540,783	7/30/96	Eres et al.	118	725	5/26/94
	A76	5,580,380	12/3/96	Liu, et al.	117	86	1/30/95
	A77	5,601,651	2/11/97	Watabe	118	715	12/14/94
	A78	5,609,689	3/11/97	Kato et al.	118	719	6/3/96
xaminer					Date Consi	dered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.



U.S. Depa	rtment of	Commerce, Pater	nt and Tradema	rk Office	Docket No	,	Serial No.
(PTO Form		•			APPM/647	3	10/074,898
SUPPLEN CITED BY	MENTAL	LIST OF PATENT	S AND PUBLIC		Applicant	VED	Confirmation No.:
OHEDBI	AFFEIG	ANI	OIP	(G)	Yookle si	. 2002	Unknown
(Use sever	ral sheets	s if necessary)	1 400	, mar de TE	Piling Date	ENTER 2800	Group
	E	xaminer Unkno	own E 30"	A Company	February 1	1, 2002	Unknown
U.S. Pater	nt Docum	nents	own Braze I	BADEMA	Marray	·	
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
	A79	5,616,181	4/1/97	Yamamoto et al.	118	723 ER	11/21/95
~~	A80	5,637,530	6/10/97	Gaines et al.	114	105	6/10/96
	A81	5,641,984	6/24/97	Aftergut et al.	257	433	8/19/94
	A82	5,644,128	7/1/97	Wollnik et al.	250	251	8/25/94
	A83	5,667,592	9/16/97	Boitnott et al.	118	719	4/16/96
	A84	5,674,786	10/7/97	Turner et al.	437	225	6/5/95
	A85	5,693,139	12/2/97	Nishizawa et al.	117	89	6/15/93
	A86	5,695,564	12/9/97	Imahashi	118	719	8/3/95
	A87	5,705,224	1/6/98	Murota et al.	427	248.1	1/31/95
	A88	5,707,880	1/13/98	Aftergut et al.	437	3	1/17/97
	A89	5,711,811	1/27/98	Suntola et al.	118	711	11/28/95
	A90	5,730,801	3/24/98	Tepman et al.	118	719	8/23/94
	A91	5,730,802	3/24/98	Ishizumi et al.	118	719	12/27/96
	A92	5,747,113	5/5/98	Tsai	427	255.5	7/29/96
	A93	5,749,974	5/12/98	Habuka et al.	118	725	7/13/95
	A94	5,788,447	8/4/98	Yonemitsu et al.	414	217	8/5/96
	A95	5,788,799	8/4/98	Steger, et al.	156	345	6/11/96
	A96	5,796,116	8/18/98	Nakata et al.	257	66	7/25/95
· · · · · · · · · · · · · · · · · · ·	A97	5,801,634	9/1/98	Young et al.	340	635	9/8/97
	A98	5,807,792	9/15/98	llg et al.	438	758	12/18/96
	A99	5,830,270	11/3/98	McKee et al.	117	106	8/5/96
	A100	5,835,677	11/10/98	Li et al.	392	401	10/3/96
	A101	5,851,849	12/22/98	Comizzoli et al.	438	38	5/22/97
	A102	5,855,675	1/5/99	Doering et al.	118	719	3/3/97
	A103	5,855,680	1/5/99	Soininen et al.	118	719	11/28/95
P	A104	5,856,219	1/5/99	Naito et al.	438	241	8/18/97
Examiner					Date Consid	lered	
*EXAMINER	: Initial if r	eference considered	l, whether or not	citation is in conforn	nance with M	PFP 609: Dr	aw line through

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.



U.S. Depai	rtment of (	Commerce, Patent	t and Trademai	rk Office	Docket No.		Serial No.
(PTO Form	1449 mo	dified)			APPM/6473	3_	10/073,898
		IST OF PATENTS	AND PUBLIC	<b>-</b> .(2)	REPRENYE	D	Confirmation No.:
CITED BY	APPLICA	ANT	0,	ma H	Yound by all	102	Unknown
(Use sever	al sheets	if necessary)	JUN °	TECH	Filing Date	ER 2800	Group
	Ex	caminer Unkno	wn K	ABIT	February 1	1, 2002	Unknown
U.S. Paten	t Docum	ents	wn Killy	RADEM Lai	· · ·	مثنون الايب	
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
	A105	5,858,102	1/12/99	Tsai	118	719	2/14/98
	A106	5,866,213	2/2/99	Foster et al.	427	573	7/19/97
	A107	5,866,795	2/2/99	Wang et al.	73	1.36	3/17/97
	A108	5,879,459	3/9/99	Gadgil et al.	118	715	8/29/97
	A109	5,882,165	3/16/99	Maydan et al.	414	217	9/10/97
	A110	5,882,413	3/16/99	Beaulieu et al.	118	719	7/11/97
	A111	5,904,565	5/18/99	Nguyen, et al.	438	687	7/17/97
	A112	5,916,365	6/29/99	Sherman	117	92	8/16/96
	A113	5,923,056	7/13/99	Lee et al.	257	192	3/12/98
	A114	5,923,985	7/13/99	Aoki et al.	438	301	1/14/97
	A115	5,925,574	7/20/99	Aoki et al.	437	31	4/10/92
	A116	5,928,389	7/27/99	Jevtic	29	25.01	10/21/96
_	A117	5,942,040	8/24/99	Kim et al.	118	726	8/27/97
	A118	5,947,710	9/7/99	Cooper, et al.	418	63	6/16/97
	A119	5,972,430	10/26/99	DiMeo, Jr. et al.	427	255.32	11/26/97
	A120	6,001,669	12/14/99	Gaines et al.	438	102	7/21/92
	A121	6,015,590	1/18/00	Suntola et al.	427	255.23	11/28/95
	A122	6,025,627	2/15/00	Forbes et al.	257	321	5/29/98
	A123	6,036,773	3/14/00	Wang et al.	117	97	3/27/97
	A124	6,042,652	3/28/00	Hyun et al.	118	719	9/7/99
	A125	6,043,177	3/28/00	Falconer et al.	502	4	1/21/97
	A126	6,051,286	4/18/00	Zhao et al.	427	576	8/22/97
	A127	6,062,798	5/16/00	Muka	414	416	6/13/96
	A128	6,071,808	6/6/00	Merchant et al.	438	633	6/23/99
	A129	6,084,302	7/4/00	Sandhu	257	751	12/26/95
	A130	6,086,677	7/11/00	Umotoy et al.	118	715	6/16/98
Examiner					Date Consid	dered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.



Number   Date   Name   Appropriate	U.S. Depar	tment of (	Commerce, Paten	t and Tradema	rk Office	Docket No.		Serial No.
Streen	(PTO Form	1449 mo	odified)					10/074,898
Voon, et al/UN   4 2002 Unknown   Voon				AND PUBLIC	ATIONS	Applicant 1	ECEIVE	Confirmation No.:
Examiner   Document   Sisue   Applicant(s)   Appl	CHEDBY	APPLICA	AN I	011	E	Yoon, et al	UN 14 200	2Unknown
Number   Date   Name   Appropriate	(Use sever	al sheets	if necessary)			Filing Date	OGY CENTE	R <b>Ch60</b> 0
Alian		E>	kaminer Unkno	wu B Jum.	EELC	February 1	1, 2002	Unknown
Alian	U.S. Paten	t Docum	ents	W. C. TRA	OEMARKS	this deriver.		
A132 6,113,977 9/5/00 Soininen et al. 427 64 9/11/97  A133 6,117,244 9/12/00 Bang, et al. 118 715 3/24/98  A134 6,124,158 9/26/00 Dautartas et al. 438 216 6/8/99  A135 6,130,147 10/10/00 Major et al. 438 604 3/18/97  A136 6,139,700 10/31/00 Kang et al. 204 192.17 9/30/98  A137 6,140,237 10/31/00 Chan et al. 438 687 4/19/99  A138 6,140,238 10/31/00 Kitch 438 687 4/21/99  A139 6,143,659 11/7/00 Leem 438 688 8/27/98  A140 6,144,060 11/7/00 Park et al. 257 310 7/31/98  A141 6,158,446 12/12/00 Mohindra et al. 134 25.4 9/4/98  A142 6,174,377 1/16/01 Doering, et al. 118 729 1/4/99  A143 6,174,809 1/16/01 Kang, et al. 438 685 3/11/98  A144 6,200,893 3/13/01 Sneh 438 685 3/11/98  A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99  A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00  A147 6,207,302 3/27/01 Sugiura, et al. 438 29 6/2/99  A149 6,270,572 8/7/01 Kim, et al. 438 648 2/23/00  A150 6,271,148 8/7/01 Kang, et al. 438 648 2/23/00  A152 6,291,876 9/18/01 Stumborg, et al. 257 632 8/20/98  A153 6,305,314 10/23/01 Sneh, et al. 118 723 R 12/17/99  A154 6,306,216 10/23/01 Kim, et al. 118 723 R 12/17/99  A154 6,306,216 10/23/01 Kim, et al. 118 723 R 12/17/99  A155 6,316,098 11/13/01 Vitzchaik, et al. 428 339 3/23/99	*Examiner Initial		1			Class	Subclass	
A133 6,117,244 9/12/00 Bang, et al. 118 715 3/24/98 A134 6,124,158 9/26/00 Dautartas et al. 438 216 6/6/99 A135 6,130,147 10/10/00 Major et al. 438 604 3/18/97 A136 6,139,700 10/31/00 Kang et al. 204 192.17 9/30/98 A137 6,140,237 10/31/00 Chan et al. 438 687 4/19/99 A138 6,140,238 10/31/00 Kitch 438 687 4/21/99 A139 6,143,659 11/7/00 Leem 438 688 8/27/98 A140 6,144,060 11/7/00 Park et al. 257 310 7/31/98 A141 6,158,446 12/12/00 Mohindra et al. 134 25.4 9/4/98 A142 6,174,377 1/16/01 Doering, et al. 118 729 1/4/99 A143 6,174,809 1/16/01 Kang, et al. 438 685 3/11/98 A144 6,200,893 3/13/01 Sneh 438 685 3/11/98 A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99 A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00 A147 6,207,302 3/27/01 Sugiura, et al. 438 29 6/2/99 A149 6,270,572 8/7/01 Kim, et al. 438 648 2/23/00 A150 6,271,148 8/7/01 Kang, et al. 438 648 2/23/00 A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00 A152 6,291,876 9/18/01 Stumborg, et al. 428 8/20/98 A153 6,305,314 10/23/01 Sneh, et al. 438 648 2/23/00 A155 6,316,098 11/13/01 Vitzchaik, et al. 428 339 3/23/99		A131	6,110,556	8/29/00	Bang, et al.	428	64.1	10/17/97
A134 6,124,158 9/26/00 Dautartas et al. 438 216 6/8/99  A135 6,130,147 10/10/00 Major et al. 438 604 3/18/97  A136 6,139,700 10/31/00 Kang et al. 204 192.17 9/30/98  A137 6,140,237 10/31/00 Chan et al. 438 687 4/19/99  A138 6,140,238 10/31/00 Kitch 438 688 4/21/99  A139 6,143,659 11/7/00 Leem 438 688 8/27/98  A140 6,144,060 11/7/00 Park et al. 257 310 7/31/98  A141 6,158,446 12/12/00 Mohindra et al. 134 25.4 9/4/98  A142 6,174,377 1/16/01 Doering, et al. 118 729 1/4/99  A143 6,174,809 1/16/01 Kang, et al. 438 685 3/11/98  A144 6,200,893 3/13/01 Sneh 438 685 3/11/98  A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99  A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00  A147 6,207,302 3/27/01 Suglura, et al. 428 690 3/2/98  A149 6,270,572 8/7/01 Kim, et al. 117 93 8/9/99  A150 6,271,148 8/7/01 Kang, et al. 438 648 2/23/00  A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00  A152 6,291,876 9/18/01 Stumborg, et al. 257 632 8/20/98  A153 6,305,314 10/23/01 Sneh, et al. 118 725 7/12/00  A155 6,316,098 11/13/01 Yitzchaik, et al. 118 725 7/12/00  A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A132	6,113,977	9/5/00	Soininen et al.	427	64	9/11/97
A135 6,130,147 10/10/00 Major et al. 438 604 3/18/97  A136 6,139,700 10/31/00 Kang et al. 204 192.17 9/30/98  A137 6,140,237 10/31/00 Chan et al. 438 687 4/19/99  A138 6,140,238 10/31/00 Kitch 438 687 4/21/99  A139 6,143,659 11/7/00 Leem 438 688 8/27/98  A140 6,144,060 11/7/00 Park et al. 257 310 7/31/98  A141 6,158,446 12/12/00 Mohindra et al. 134 25.4 9/4/98  A142 6,174,377 1/16/01 Doering, et al. 118 729 1/4/99  A143 6,174,809 1/16/01 Kang, et al. 438 682 12/15/98  A144 6,200,893 3/13/01 Sneh 438 685 3/11/98  A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99  A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00  A147 6,207,302 3/27/01 Suglura, et al. 428 690 3/2/98  A148 6,248,605 6/19/01 Harkonen, et al. 438 29 6/2/99  A150 6,271,148 8/7/01 Kao et al. 438 648 2/23/00  A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00  A152 6,291,876 9/18/01 Stumborg, et al. 257 632 8/20/98  A153 6,305,314 10/23/01 Sneh, et al. 118 725 7/12/00  A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A133	6,117,244	9/12/00	Bang, et al.	118	715	3/24/98
A136 6,139,700 10/31/00 Kang et al. 204 192.17 9/30/98  A137 6,140,237 10/31/00 Chan et al. 438 687 4/19/99  A138 6,140,238 10/31/00 Kitch 438 687 4/21/99  A139 6,143,659 11/7/00 Leem 438 688 8/27/98  A140 6,144,060 11/7/00 Park et al. 257 310 7/31/98  A141 6,158,446 12/12/00 Mohindra et al. 134 25.4 9/4/98  A142 6,174,377 1/16/01 Doering, et al. 118 729 1/4/99  A143 6,174,809 1/16/01 Kang, et al. 438 682 12/15/98  A144 6,200,893 3/13/01 Sneh 438 685 3/11/98  A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99  A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00  A147 6,207,302 3/27/01 Sugiura, et al. 428 690 3/2/98  A148 6,248,605 6/19/01 Harkonen, et al. 438 29 6/2/99  A149 6,270,572 8/7/01 Kim, et al. 117 93 8/9/99  A150 6,271,148 8/7/01 Kao et al. 438 648 2/23/00  A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00  A152 6,291,876 9/18/01 Stumborg, et al. 118 723 R 12/17/99  A154 6,306,216 10/23/01 Kim, et al. 118 725 7/12/00  A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A134	6,124,158	9/26/00	Dautartas et al.	438	216	6/8/99
A137 6,140,237 10/31/00 Chan et al. 438 687 4/19/99 A138 6,140,238 10/31/00 Kitch 438 687 4/21/99 A139 6,143,659 11/7/00 Leem 438 688 8/27/98 A140 6,144,060 11/7/00 Park et al. 257 310 7/31/98 A141 6,158,446 12/12/00 Mohindra et al. 134 25.4 9/4/98 A142 6,174,377 1/16/01 Doering, et al. 118 729 1/4/99 A143 6,174,809 1/16/01 Kang, et al. 438 682 12/15/98 A144 6,200,893 3/13/01 Sneh 438 685 3/11/98 A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99 A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00 A147 6,207,302 3/27/01 Sugiura, et al. 428 690 3/2/98 A148 6,248,605 6/19/01 Harkonen, et al. 438 29 6/2/99 A149 6,270,572 8/7/01 Kim, et al. 117 93 8/9/99 A150 6,271,148 8/7/01 Kao et al. 438 648 2/23/00 A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00 A152 6,291,876 9/18/01 Stumborg, et al. 257 632 8/20/98 A153 6,305,314 10/23/01 Sneh, et al. 118 723 R 12/17/99 A154 6,306,216 10/23/01 Kim, et al. 118 725 7/12/00 A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A135	6,130,147	10/10/00	Major et al.	438	604	3/18/97
A138 6,140,238 10/31/00 Kitch 438 687 4/21/99  A139 6,143,659 11/7/00 Leem 438 688 8/27/98  A140 6,144,060 11/7/00 Park et al. 257 310 7/31/98  A141 6,158,446 12/12/00 Mohindra et al. 134 25.4 9/4/98  A142 6,174,377 1/16/01 Doering, et al. 118 729 1/4/99  A143 6,174,809 1/16/01 Kang, et al. 438 682 12/15/98  A144 6,200,893 3/13/01 Sneh 438 685 3/11/98  A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99  A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00  A147 6,207,302 3/27/01 Sugiura, et al. 428 690 3/2/98  A148 6,248,605 6/19/01 Harkonen, et al. 438 29 6/2/99  A149 6,270,572 8/7/01 Kim, et al. 117 93 8/9/99  A150 6,271,148 8/7/01 Kao et al. 438 727 10/13/99  A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00  A152 6,291,876 9/18/01 Stumborg, et al. 257 632 8/20/98  A153 6,305,314 10/23/01 Sneh, et al. 118 723 R 12/17/99  A154 6,306,216 10/23/01 Kim, et al. 118 725 7/12/00  A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A136	6,139,700	10/31/00	Kang et al.	204	192.17	9/30/98
A139 6,143,659 11/7/00 Leem 438 688 8/27/98  A140 6,144,060 11/7/00 Park et al. 257 310 7/31/98  A141 6,158,446 12/12/00 Mohindra et al. 134 25.4 9/4/98  A142 6,174,377 1/16/01 Doering, et al. 118 729 1/4/99  A143 6,174,809 1/16/01 Kang, et al. 438 682 12/15/98  A144 6,200,893 3/13/01 Sneh 438 685 3/11/98  A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99  A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00  A147 6,207,302 3/27/01 Sugiura, et al. 428 690 3/2/98  A148 6,248,605 6/19/01 Harkonen, et al. 438 29 6/2/99  A149 6,270,572 8/7/01 Kim, et al. 117 93 8/9/99  A150 6,271,148 8/7/01 Kao et al. 438 727 10/13/99  A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00  A152 6,291,876 9/18/01 Stumborg, et al. 257 632 8/20/98  A153 6,305,314 10/23/01 Sneh, et al. 118 723 R 12/17/99  A154 6,306,216 10/23/01 Kim, et al. 118 725 7/12/00  A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A137	6,140,237	10/31/00	Chan et al.	438	687	4/19/99
A140 6,144,060 11/7/00 Park et al. 257 310 7/31/98  A141 6,158,446 12/12/00 Mohindra et al. 134 25.4 9/4/98  A142 6,174,377 1/16/01 Doering, et al. 118 729 1/4/99  A143 6,174,809 1/16/01 Kang, et al. 438 682 12/15/98  A144 6,200,893 3/13/01 Sneh 438 685 3/11/98  A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99  A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00  A147 6,207,302 3/27/01 Sugiura, et al. 428 690 3/2/98  A148 6,248,605 6/19/01 Harkonen, et al. 438 29 6/2/99  A149 6,270,572 8/7/01 Kim, et al. 117 93 8/9/99  A150 6,271,148 8/7/01 Kao et al. 438 727 10/13/99  A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00  A152 6,291,876 9/18/01 Stumborg, et al. 257 632 8/20/98  A153 6,305,314 10/23/01 Sneh, et al. 118 723 R 12/17/99  A154 6,306,216 10/23/01 Kim, et al. 118 725 7/12/00  A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A138	6,140,238	10/31/00	Kitch	438	687	4/21/99
A141 6,158,446 12/12/00 Mohindra et al. 134 25.4 9/4/98  A142 6,174,377 1/16/01 Doering, et al. 118 729 1/4/99  A143 6,174,809 1/16/01 Kang, et al. 438 682 12/15/98  A144 6,200,893 3/13/01 Sneh 438 685 3/11/98  A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99  A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00  A147 6,207,302 3/27/01 Sugiura, et al. 428 690 3/2/98  A148 6,248,605 6/19/01 Harkonen, et al. 438 29 6/2/99  A149 6,270,572 8/7/01 Kim, et al. 117 93 8/9/99  A150 6,271,148 8/7/01 Kao et al. 438 727 10/13/99  A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00  A152 6,291,876 9/18/01 Stumborg, et al. 257 632 8/20/98  A153 6,305,314 10/23/01 Sneh, et al. 118 723 R 12/17/99  A154 6,306,216 10/23/01 Kim, et al. 118 725 7/12/00  A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A139	6,143,659	11/7/00	Leem	438	688	8/27/98
A142 6,174,377 1/16/01 Doering, et al. 118 729 1/4/99  A143 6,174,809 1/16/01 Kang, et al. 438 682 12/15/98  A144 6,200,893 3/13/01 Sneh 438 685 3/11/98  A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99  A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00  A147 6,207,302 3/27/01 Sugiura, et al. 428 690 3/2/98  A148 6,248,605 6/19/01 Harkonen, et al. 438 29 6/2/99  A149 6,270,572 8/7/01 Kim, et al. 117 93 8/9/99  A150 6,271,148 8/7/01 Kao et al. 438 727 10/13/99  A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00  A152 6,291,876 9/18/01 Stumborg, et al. 257 632 8/20/98  A153 6,305,314 10/23/01 Sneh, et al. 118 723 R 12/17/99  A154 6,306,216 10/23/01 Kim, et al. 118 725 7/12/00  A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A140	6,144,060	11/7/00	Park et al.	257	310	7/31/98
A143 6,174,809 1/16/01 Kang, et al. 438 682 12/15/98  A144 6,200,893 3/13/01 Sneh 438 685 3/11/98  A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99  A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00  A147 6,207,302 3/27/01 Sugiura, et al. 428 690 3/2/98  A148 6,248,605 6/19/01 Harkonen, et al. 438 29 6/2/99  A149 6,270,572 8/7/01 Kim, et al. 117 93 8/9/99  A150 6,271,148 8/7/01 Kao et al. 438 727 10/13/99  A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00  A152 6,291,876 9/18/01 Stumborg, et al. 257 632 8/20/98  A153 6,305,314 10/23/01 Sneh, et al. 118 723 R 12/17/99  A154 6,306,216 10/23/01 Kim, et al. 118 725 7/12/00  A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A141	6,158,446	12/12/00	Mohindra et al.	134	25.4	9/4/98
A144 6,200,893 3/13/01 Sneh 438 685 3/11/98  A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99  A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00  A147 6,207,302 3/27/01 Sugiura, et al. 428 690 3/2/98  A148 6,248,605 6/19/01 Harkonen, et al. 438 29 6/2/99  A149 6,270,572 8/7/01 Kim, et al. 117 93 8/9/99  A150 6,271,148 8/7/01 Kao et al. 438 727 10/13/99  A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00  A152 6,291,876 9/18/01 Stumborg, et al. 257 632 8/20/98  A153 6,305,314 10/23/01 Sneh, et al. 118 723 R 12/17/99  A154 6,306,216 10/23/01 Kim, et al. 118 725 7/12/00  A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A142	6,174,377	1/16/01	Doering, et al.	118	729	1/4/99
A145 6,203,613 3/20/01 Gates, et al. 117 104 10/19/99  A146 6,206,967 3/27/01 Mak, et al. 118 666 6/14/00  A147 6,207,302 3/27/01 Sugiura, et al. 428 690 3/2/98  A148 6,248,605 6/19/01 Harkonen, et al. 438 29 6/2/99  A149 6,270,572 8/7/01 Kim, et al. 117 93 8/9/99  A150 6,271,148 8/7/01 Kao et al. 438 727 10/13/99  A151 6,287,965 9/11/01 Kang, et al. 438 648 2/23/00  A152 6,291,876 9/18/01 Stumborg, et al. 257 632 8/20/98  A153 6,305,314 10/23/01 Sneh, et al. 118 723 R 12/17/99  A154 6,306,216 10/23/01 Kim, et al. 118 725 7/12/00  A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A143	6,174,809	1/16/01	Kang, et al.	438	682	12/15/98
A146       6,206,967       3/27/01       Mak, et al.       118       666       6/14/00         A147       6,207,302       3/27/01       Sugiura, et al.       428       690       3/2/98         A148       6,248,605       6/19/01       Harkonen, et al.       438       29       6/2/99         A149       6,270,572       8/7/01       Kim, et al.       117       93       8/9/99         A150       6,271,148       8/7/01       Kao et al.       438       727       10/13/99         A151       6,287,965       9/11/01       Kang, et al.       438       648       2/23/00         A152       6,291,876       9/18/01       Stumborg, et al.       257       632       8/20/98         A153       6,305,314       10/23/01       Sneh, et al.       118       723 R       12/17/99         A154       6,306,216       10/23/01       Kim, et al.       118       725       7/12/00         A155       6,316,098       11/13/01       Yitzchaik, et al.       428       339       3/23/99		A144	6,200,893	3/13/01	Sneh	438	685	3/11/98
A147       6,207,302       3/27/01       Sugiura, et al.       428       690       3/2/98         A148       6,248,605       6/19/01       Harkonen, et al.       438       29       6/2/99         A149       6,270,572       8/7/01       Kim, et al.       117       93       8/9/99         A150       6,271,148       8/7/01       Kao et al.       438       727       10/13/99         A151       6,287,965       9/11/01       Kang, et al.       438       648       2/23/00         A152       6,291,876       9/18/01       Stumborg, et al.       257       632       8/20/98         A153       6,305,314       10/23/01       Sneh, et al.       118       723 R       12/17/99         A154       6,306,216       10/23/01       Kim, et al.       118       725       7/12/00         A155       6,316,098       11/13/01       Yitzchaik, et al.       428       339       3/23/99		A145	6,203,613	3/20/01	Gates, et al.	117	104	10/19/99
A148       6,248,605       6/19/01       Harkonen, et al.       438       29       6/2/99         A149       6,270,572       8/7/01       Kim, et al.       117       93       8/9/99         A150       6,271,148       8/7/01       Kao et al.       438       727       10/13/99         A151       6,287,965       9/11/01       Kang, et al.       438       648       2/23/00         A152       6,291,876       9/18/01       Stumborg, et al.       257       632       8/20/98         A153       6,305,314       10/23/01       Sneh, et al.       118       723 R       12/17/99         A154       6,306,216       10/23/01       Kim, et al.       118       725       7/12/00         A155       6,316,098       11/13/01       Yitzchaik, et al.       428       339       3/23/99		A146	6,206,967	3/27/01	Mak, et al.	118	666	6/14/00
A149       6,270,572       8/7/01       Kim, et al.       117       93       8/9/99         A150       6,271,148       8/7/01       Kao et al.       438       727       10/13/99         A151       6,287,965       9/11/01       Kang, et al.       438       648       2/23/00         A152       6,291,876       9/18/01       Stumborg, et al.       257       632       8/20/98         A153       6,305,314       10/23/01       Sneh, et al.       118       723 R       12/17/99         A154       6,306,216       10/23/01       Kim, et al.       118       725       7/12/00         A155       6,316,098       11/13/01       Yitzchaik, et al.       428       339       3/23/99		A147	6,207,302	3/27/01	Sugiura, et al.	428	690	3/2/98
A150       6,271,148       8/7/01       Kao et al.       438       727       10/13/99         A151       6,287,965       9/11/01       Kang, et al.       438       648       2/23/00         A152       6,291,876       9/18/01       Stumborg, et al.       257       632       8/20/98         A153       6,305,314       10/23/01       Sneh, et al.       118       723 R       12/17/99         A154       6,306,216       10/23/01       Kim, et al.       118       725       7/12/00         A155       6,316,098       11/13/01       Yitzchaik, et al.       428       339       3/23/99		A148	6,248,605	6/19/01	Harkonen, et al.	438	29	6/2/99
A151       6,287,965       9/11/01       Kang, et al.       438       648       2/23/00         A152       6,291,876       9/18/01       Stumborg, et al.       257       632       8/20/98         A153       6,305,314       10/23/01       Sneh, et al.       118       723 R       12/17/99         A154       6,306,216       10/23/01       Kim, et al.       118       725       7/12/00         A155       6,316,098       11/13/01       Yitzchaik, et al.       428       339       3/23/99		A149	6,270,572	8/7/01	Kim, et al.	117	93	8/9/99
A152       6,291,876       9/18/01       Stumborg, et al.       257       632       8/20/98         A153       6,305,314       10/23/01       Sneh, et al.       118       723 R       12/17/99         A154       6,306,216       10/23/01       Kim, et al.       118       725       7/12/00         A155       6,316,098       11/13/01       Yitzchaik, et al.       428       339       3/23/99	· · · · · · · · · · · · · · · · · · ·	A150	6,271,148	8/7/01	Kao et al.	438	727	10/13/99
A153       6,305,314       10/23/01       Sneh, et al.       118       723 R       12/17/99         A154       6,306,216       10/23/01       Kim, et al.       118       725       7/12/00         A155       6,316,098       11/13/01       Yitzchaik, et al.       428       339       3/23/99		A151	6,287,965	9/11/01	Kang, et al.	438	648	2/23/00
A154       6,306,216       10/23/01       Kim, et al.       118       725       7/12/00         A155       6,316,098       11/13/01       Yitzchaik, et al.       428       339       3/23/99		A152	6,291,876	9/18/01	Stumborg, et al.	257	632	8/20/98
A155 6,316,098 11/13/01 Yitzchaik, et al. 428 339 3/23/99		A153	6,305,314	10/23/01	Sneh, et al.	118	723 R	12/17/99
		A154	6,306,216	10/23/01	Kim, et al.	118	725	7/12/00
		A155	6,316,098	11/13/01	Yitzchaik, et al.	428	339	3/23/99
A156 2001/0042799 11/22/01 Kim, et al. 239 553 2/2/01		A156	2001/0042799	11/22/01	Kim, et al.	239	553	2/2/01
Examiner Date Considered	Examiner					Date Consid	dered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.



U.S. Depai	rtment of	Commerce, Paten	t and Tradema	rk Office	Docket No.		Serial No.
(PTO Form	1449 mc	odified)			APPM/6473	3	10/074,898
		IST OF PATENTS	AND PUBLIC	CATIONS	Applicant	CEIVED	Confirmation No.:
CITED BY	APPLICA	ANT	/	SIPE	Yoon, et 圳		
(Use sever	al sheets	if necessary)		05	Filing Date	GY CENTER	26 f6 up
	Ex	kaminer Unkno	wu 🖁 📶	N 1 2002 3	February 1	1, 2002	Unknown
U.S. Pater	t Docum	ents	W.	Applicant(s)	Andrian de la companya de la company		and to find
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
	A157	2001/0041250	11/15/01	Werkhoven et al	. 428	212	3/6/01
	A158	2001/0034123	10/25/01	Jeon, et al.	438	643	4/6/01
	A159	2001/0031562	10/18/01	Raaijmakers et al.	438	770	2/22/01
	A160	2001/0011526	8/9/01	Doering, et al.	118	729	1/16/01
	A161	2001/0009140	7/26/01	Bondestam, et al.	118	725	1/25/01
	A162	2001/0000866	5/10/01	Sneh, et al.	118	723 R	11/29/00
			,				
	-						
	-					<u> </u>	
	-						
Examiner					Date Consid	dered	

2.DOT



(PTO Form		of Commerce, Pate modified)			Docket No DF APPM/64	CEIVED	Serial No. 10/074,898	8
SUPPLEM	IENTAL	LIST OF PATENT	S AND PUBLICA	TIONS	Applicable		Confirmation	
CITED BY			OIP	E 45.10.	, ,	MY CENTER 28	İ	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
(Use sever	ral shee	ets if necessary)	g JUN 11	2002 y	Filing Date	е	Group	
		Examiner Unkn	own E	2002	February	11, 2002	Ünknown	
Foreign P	atent D	ocuments	nown RADE	MAED			<u> </u>	
*Examiner Initial		Document Number	Date	Country	Class	Subclass	Translat YES	tion
	B1	196 27 017A1	1/9/97	DE	H01L	21/283		
	B2	198 20 147A1	7/1/99	DE	H01L	21/3205		
	В3	0 429 270 A2	5/29/91	EP	G03F	Jul-36		
	B4	0 799 641 A2	10/8/97	EP	B01J	20/32		一
	B5	0 442 290 A1	2/14/91	EP	C30B	25/02		十一
	В6	0 344 352 A1	6/3/88	EP	H01L	39/24		洁
	B7	2.626.110	7/21/89	FR	H01L	39/24		
	B8	2.692.597	12/24/93	FR	C23C	16/00		一
	B9	2 355 727A	05/02/12001	GB	C23C	16/44		
	B10	58-098917	6/13/83	JP	H01L	21/205		
	B11	58-100419	6/15/83	JP	H01L	21/20		
	B12	60-065712A	4/15/85	JP	C01B	33/113		
	B13	61-035847	2/20/86	JP	B01J	19/08	$\boxtimes$	
	B14	61-210623	9/18/86	JP	H01L	21/205	$\boxtimes$	
	B15	62-069508	3/30/87	JP	H01L	21/203	$\boxtimes$	
	B16	62-091,495	4/25/87	JP	C30B	25/02	$\boxtimes$	
	B17	62-141717	6/25/87	JP	H01L	21/203	$\boxtimes$	
	B18	62-167297	7/23/87	JP	C30B	29/40	$\boxtimes$	
	B19	62-171999	7/28/87	JP	C30B	29/40	$\boxtimes$	
	B20	62-232919	10/13/87	JP	H01L	21/205	$\boxtimes$	
	B21	63-062313	3/18/88	JP	H01L	21/203	$\boxtimes$	
	B22	63-085098	4/15/88	JP	C30B	21/40		
	B23	63-090833	4/21/88	JP	H01L	21/365	$\boxtimes$	
	B 24	63-222420	9/16/88	JP	H01L	21/205		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.



U.S. Depa	rtment	of Commerce, Pa	tent and Traden	nark Office	Docket No	P.RECEIV	Serial No.	
(PTO Forn		,			APPM/64	73	46/074,89	8
SUPPLEM CITED BY	IENTAL	LIST OF PATE	NTS AND PUBL	ICATIONS	Applicant	JUN 14 2	<b> ② ② ② ② ② ② Onfirmation</b>	on No.:
CITED BT	AFFLI			£105	Yoon, et a	OLUGY CEN	i E <b>Urakno</b> yvn	
(Use sever	ral shee	ets if necessary)	known The state of	1 1 2002 별	Filing Date	9	Group	
		Examiner Unl	known	j. j.	February	11, 2002	Unknown	
Foreign P	atent D	ocuments	TI.	MOEMARI				
*Examiner Initial		Document Number	Date	Country	Class	Subclass	Transla YES	tion
	B25	63-222421	9/16/88	JP	H01L	21/205		
96.9****	B26	63-227007	9/21/88	JP	H01L	21/205		
	B27	63-252420	10/19/88	JP	H01L	21/205		
	B28	63-266814	11/2/88	JP	H01L	21/205		
	B29	64-009895	1/13/89	JP	C30B	29/40		
	B30	64-009896	1/13/89	JP	C30B	29/40		
	B31	64-009897	1/13/89	JP	C30B	29/40		
	B32	64-037832	2/8/89	JP	H01L	21/205		一
	B33	64-082615	3/28/89	JP	H01L	21/205		
	B34	64-082617	3/28/89	JP	H01L	21/205		
	B35	64-082671	3/28/89	JP	H01L	29/78		
	B36	64-082676	3/28/89	JP	H01L	29/80	$\boxtimes$	
	B37	64-090524	4/7/89	JP	H01L	21/205	$\boxtimes$	
	B38	01-103982	4/21/89	JP	C30B	23/08	$\boxtimes$	
	B39	01-103996	4/21/89	JP	C30B	29/40	$\boxtimes$	
	B40	01-117017	5/9/89	JP	H01L	21/203	$\boxtimes$	
	B41	01-143221	6/5/89	JP	H01L	21/314	$\boxtimes$	
	B42	01-143233	6/5/89	JP	H01L	21/76	$\boxtimes$	
	B43	01-154511	6/16/89	JP	H01L	21/20	$\boxtimes$	
	B44	01-236657	9/21/89	JP	H01L	29/80	$\boxtimes$	
	B45	01-245512	9/29/89	JP	H01L	21/205	$\boxtimes$	
	B46	01-264218	10/20/89	JP	H01L	21/205	$\boxtimes$	
	B47	01-270593	10/27/89	JP	C30B	25/02	$\boxtimes$	
	B48	01-272108	10/31/89	JP	H01L	21/203	$\boxtimes$	
Examiner	<b>-</b> 4				Date Cons	idered		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.



<del></del> -		of Commerce, Pate	ent and Tradema	ark Onice	Docket No.	RECEI	Serial No. 10/074,898	_
(PTO Form			TO AND DUDI	10 A TIONE	APPM/647		1	
CITED BY		. LIST OF PATEN CANT		ICATIONS	Applicant		2030nfirmatio	n No.:
				Y Cie	Yoon, efal	HNOLOGY CE	rfuk58A0	
(Use sever	al shee	ts if necessary)		4 1 2002 VI	Filing Date	;	Group	
		Examiner Unki	nown	JUN 1 1 2002 1	February 1	1, 2002	Unknown	
Foreign Pa	atent De	ocuments	- V	Country Country				
*Examiner		Document	Date	Country	Class	Subclass	Translat	tion
Initial		Number					YES	NO
	B49	01-290221	11/22/89	JP	H01L	21/205	$\boxtimes$	
	B50	01-290222	11/22/89	JP	H01L	21/205	$\boxtimes$	
	B51	01-296673	11/30/89	JP	H01L	29/88		
	B52	01-303770	12/7/89	JP	H01L	39/24		
	B53	01-305894	12/11/89	JP	C30B	23/08	$\boxtimes$	
	B54	01-313927	12/19/89	JP	H01L	21/205	$\boxtimes$	
	B55	02-012814	1/17/90	JP	H01L	21/205	$\boxtimes$	
	B56	02-014513	1/18/90	JP	H01L	21/205		
	B57	02-017634	1/22/90	JP	H01L	21/225	$\boxtimes$	
	B58	02-063115	3/2/90	JP	H01L	21/20	$\boxtimes$	
	B59	02-074029	3/14/90	JP	H01L	21/205		
	B60	02-074587	3/14/90	JP	C30B	23/08		
	B61	02-106822	4/18/90	JP	H01B	13/00		
	B62	02-129913	5/18/90	JP	H01L	21/205		
	B63	02-162717	6/22/90	JP	H01L	21/20		
	B64	02-172895	7/4/90	JP	C30B	29/36		
	B65	02-196092	8/2/90	JP	C30B	25/14		
	B66	02-203517	8/13/90	JP	H01L	21/205		
	B67	02-230690	9/13/90	JP	H05B	33/10		
	B68	02-230722	9/13/90	JP	H01L	21/205		
	B69	02-246161	10/1/90	JP	H01L	29/784		
	B70	02-264491	10/29/90	JP	H01S	18-Mar		1
	B71	02-283084	11/20/90	JP	H01S	18-Mar		1
	B72	02-304916	12/18/90	JP	H01L	21/205		
Examiner		<u> </u>			Date Cons	idered	L <del>-</del>	1

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.



2.DOT

· ·		of Commerce, Pat	ent and Tradem	ark Office	Docket No	KEU	Serial No.	
(PTO Form		·			APPM/647	73	10/074,7898	
SUPPLEME CITED BY A		LIST OF PATEN			Applicant	JUN	on Alfatio	on No.:
<b>0</b>		,,,,,	01	PE	Yoon, et a	TECHNOLOG	95KADWR8	100
(Use severa	al sheet	ts if necessary)		- mm	Filing Date	)	Group	
		Examiner Unk	known E JUN	1 1 2002 5	February 1		Unknown	- <u>56-23</u>
Foreign Pa	tent De	ocuments	Exter	BENCO				
*Examiner Initial		Document Number	Date	American	Class	Subclass	Translat YES	tion
	B73	03-019211	1/28/91	JP	H01L	21/205	$\boxtimes$	
	B74	03-022569	1/30/91	JP	H01L	29/804	$\boxtimes$	$\dagger \overline{\Box}$
	B75	03-023294	1/31/91	JP	C30B	25/18	$\boxtimes$	
	B76	03-023299	1/31/91	JP	C30B	29/40	$\boxtimes$	
	B77	03-044967	2/26/91	JP	H01L	29/48	$\boxtimes$	$\Box$
· · · · · · · · · · · · · · · · · · ·	B78	03-048421	3/1/91	JP	H01L	21/302	$\boxtimes$	
	B79	03-070124	3/26/91	JP	H01L	21/205	$\boxtimes$	
	B80	03-185716	8/13/91	JP	H01L	21/205	$\boxtimes$	
	B81	03-208885	9/12/91	JP	C30B	23/02	$\boxtimes$	
	B82	03-234025	10/18/91	JP	H01L	21/318	$\boxtimes$	
	B83	03-286522	12/17/91	JP	H01L	21/205	$\boxtimes$	
	B84	03-286531	12/17/91	JP	H01L	21/316		
	B85	04-031391	2/3/92	JP	C30B	23/08	$\boxtimes$	
	B86	04-031396	2/3/92	JP	C30B	25/14	$\boxtimes$	
	B87	04-031396	2/3/92	JP	C30B	25/14	$\boxtimes$	
	B88	04-100292	4/2/92	JP	H01S	18-Mar	$\boxtimes$	
	B89	04-111418	4/13/92	JP	H01L	21/205	$\boxtimes$	
	B90	04-132214	5/6/92	JP	H01L	21/205	$\boxtimes$	
	B91	04-132681	5/6/92	JP	C30B	25/14	$\boxtimes$	
	B92	04/151822	5/25/92	JP	H01L	21/205	$\boxtimes$	
	B93	04-162418	6/5/92	JP	H01L	21/205	$\boxtimes$	
	B94	04-175299	6/23/92	JP	C30B	29/68	$\boxtimes$	
	B95	04-186824	7/3/92	JP	H01L	21/205	$\boxtimes$	
	·		8/4/92	JP	H01L	21/203		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.



<del></del>		Commerce, Pate	and madein	ark Office		, RECEIV	<b>.</b>	
(PTO Form		·		0.7.0.10	APPM/647	73 JUN 14 2	10/074,89	
CITED BY		IST OF PATEN ANT	IS AND PUBL	CATIONS	Applicant, Yoon, et a	NOLOGY CEN I.	Confirmation ER 2800 Unknown	on No.:
(Use sever	al sheets	if necessary)	MIN	1 2002 법	Filing Date	9	Group	
	E	xaminer Unkr	nown	1 2002	February <sup>2</sup>	11, 2002	Unknown	
Foreign Pa	atent Do	cuments	nown	PADEMARI			<del>l</del>	
*Examiner		Document	Date	Country	Class	Subclass	Transla	tion
Initial		Number					YES	NO
	B97	04-260696	9/16/92	JP	C30B	29/40	$\boxtimes$	
	B98	04-273120	9/29/92	JP	H01L	21/20	$\boxtimes$	
	B99	04-285167	10/9/92	JP	C23C	14/54	$\boxtimes$	
	B100	04-291916	10/16/92	JP	H01L	21/205	$\boxtimes$	
	B101	04-325500	11/13/92	JP	C30B	33/00	$\boxtimes$	
	B102	04-328874	11/17/92	JP	H01L	29/804	$\boxtimes$	
	B103	05-029228	2/5/93	JP	H01L	21/205	$\boxtimes$	
	B104	05-047665	2/26/93	JP	H01L	21/205	$\boxtimes$	$\top$
	B105	05-047666	2/26/93	JP	H01L	21/205	$\boxtimes$	
	B106	05-047668	2/26/93	JP	H01L	21/205		
	B107	05-074717	3/26/93	JP	H01L	21/205	$\boxtimes$	
	B108	05-074724	3/26/93	JP	H01L	21/205	$\boxtimes$	
	B109	05-102189	4/23/93	JP	H01L	21/336	$\boxtimes$	
<del></del>	B110	05-160152	6/25/93	JP	H01L	21/336	$\boxtimes$	
	B111	05-175143	7/13/93	JP	H01L	21/205		
	B112	05-175145	7/13/93	JP	H01L	21/205	$\boxtimes$	
	B113	05-182906	7/23/93	JP	H01L	21/20		
	B114	05-186295	7/27/93	JP	C30B	25/02		
	B115	05-206036	8/13/93	JP	H01L	21/205		$\dagger \bar{\Box}$
	B116	05-234899	9/10/93	JP	H01L	21/205		
	B117	05-235047	9/10/93	JP	H01L	21/338		十一
	B118	05-251339	9/28/93	JP	H01L	21/20		十一
	B119	05-270997	10/19/93	JP	C30B	29/68		十一
	B120	05-283336	10/29/93	JP	H01L	21/20		
Examiner	1	1			Date Cons	idorod		

T:\CLIENTS\APPM\6000-6999\6473\PTO\IDS1449

2.DOT

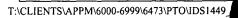
Sheet 13 of 18 sheet(s

U.S. Department of Commerce, Patent and Trademark Office					Docket No.		Serial No.	
(PTO Form 1449 modified)					APPM/6473		RECE4,828	
SUPPLEMENTAL LIST OF PATENTS AND PUBLICATIONS CITED BY APPLICANT					Applicant  Yoon, et al.  Filing Date  Confirmation N  Confirmation N  UN   L, 2002  Unknown 2  Group  Group			n No.:
(Use sever	al sheets	if necessary)	Filing Date Group			2800		
· · · · · · · · · · · · · · · · · · ·	E	xaminer Unkno	February 1	1, 2002	Unknown			
Foreign Pa	atent Do	cuments	W.	- ARK				,
*Examiner		Document	Date	Country	Class	Subclass	Translation	
Initial		Number					YES	NO
	B121	05-291152	11/5/93	JP	H01L	21/205		
	B122	05-304334	11/16/93	JP	H01L	18-Mar		
	B123	05-343327	12/24/93	JP	H01L	21/205		
	B124	05-343685	12/24/93	JP	H01L	29/784		
	B125	06-045606	2/18/94	JP	H01L	29/784		
	B126	06-132236	5/13/94	JP	H01L	21/205		
	B127	06-177381	6/24/94	JP	H01L	29/784		
	B128	06-196809	7/15/94	JP	H01S	18-Mar	$\boxtimes$	
	B129	06-222388	8/12/94	JP	G02F	1/136	$\boxtimes$	
	B130	06-224138	8/12/94	JP	H01L	21/205	$\boxtimes$	
	B131	06-230421	8/19/94	JP	G02F	1/136	$\boxtimes$	
	B132	06-252057	9/9/94	JP	H01L	21/205		
	B133	06-291048	10/18/94	JP	H01L	21/205		
	B134	07-086269	3/13/95	JP	H01L	21/314	$\boxtimes$	
·	B135	07-070752	3/14/95	JP ·	C23C	16/40	$\boxtimes$	
	B136	08-181076	7/12/96	JP	H01L	21/205	$\boxtimes$	
	B137	08-245291	9/24/96	JP	C30B	25/14	$\boxtimes$	
	B138	08-264530	10/11/96	JP	H01L	21/3205		
	B139	09-260786	10/3/97	JP	H01S	18-Mar		
	B140	09-293681	11/11/97	JP	H01L	21/205		
	B141	10-188840	7/21/98	JP	H01J	29/18		
	B142	10-190128	7/21/98	JP	H01S	18-Mar		
	B143	10-308283	11/17/98	JP	H05B	33/22		
	B144	11-269652	10/5/99	JP	C23C	16/44	$\boxtimes$	
	B145	11-269652	10/5/99	JP	C23C	16/44		
	B146	2000-031387	1/28/00	JP	H01L	27/04		
Examiner	<u> </u>		<del></del>	<del></del>	Date Cons	idered	·	
*EXAMINEF	R: Initial if r	reference considere	d, whether or no	ot citation is in co	nformance with	MPEP 609: D	raw line throu	igh

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.



U.S. Department of Commerce, Patent and Trademark Office					Docket No.		Serial No.	
(PTO Form	1449 mc	odified)			APPM/6473 RE		10/074,898	3
SUPPLEMENTAL LIST OF PATENTS AND PUBLICATIONS CITED BY APPLICANT					Applicant		Confirmation	
CHEDBI	APPLICA	AN I		OIPE	Yoon, et a	J <b>UN</b> TECHNOLOGY	Únkhown	
(Use sever	al sheets	if necessary)		D JUN 1 1 2002 W	Filing Date	,	Group 280	)0
	E	xaminer Unkno	own	E JUN E	February 1	1, 2002	Unknown	
Foreign Pa	atent Doc	uments		Country			Silver Ba	
*Examiner Initial		Document Number	Date	Country	Class	Subclass	Translat	<del></del>
	<u> </u>		0/05/00		11041	07/400	YES	NO
	B147	2000-058777	2/25/00	JP	H01L	27/108		
	B148	2000-068072	3/3/00	JP	H05B	33/22		
	B149	2000-087029	3/28/00	JP	C09K	8-Nov		
	B150	2000-319772	3/28/00	JP	C23C	16/00	$\boxtimes$	
	B151	2000-138094	5/16/00	JP	H05B	33/10	$\boxtimes$	
	B152	2000-218445	8/8/00	JP	B23P	Jun-00	$\boxtimes$	
	B153	2000-319772	11/21/00	JP	C23C	14/24	$\boxtimes$	
	B154	2000-340883	12/8/00	JP	H01S	5/125	$\boxtimes$	
	B155	2000-353666	12/19/00	JP	H01L	21/205	$\boxtimes$	
	B156	2001-020075	1/23/01	JP	C23C	16/44		
	B157	2001-62244	3/13/01	JP	B01D	53/34	$\boxtimes$	
	B158	2001-152339	6/5/01	JP	C23C	16/40	$\boxtimes$	
	B159	2001-172767	6/26/01	JP	C23C	16/40		
	B160	2001-189312	7/10/01	JP	H01L	21/316	$\boxtimes$	
	B161	2001-217206	8/10/01	JP	H01L	21/285	$\boxtimes$	
	B162	2001-220287	8/14/01	JP	C30B	25/02	$\boxtimes$	
<del></del>	B163	2001-220294	8/14/01	JP	C30B	29/20	$\boxtimes$	
	B164	2001-240972	9/4/01	JP	C23C	16/458		
	B165	2001-254181	9/18/01	JP	C23C	16/46		
· · · · · · · · · · · · · · · · · · ·	B166	2001-284042	10/12/01	JP	H05B	33/04		
	B167	2001-303251	10/31/01	JP	C23C	16/44		
	B168	2001-328900	11/27/01	JP	C30B	29/68		
	B169	90/02216	3/8/90	WO	C23C	14/34		
	B170	91/10510	7/25/91	WO	B01J	37/02		
	B171	93/0211	2/4/93	WO	C08F	Apr-78		Ι 🗆 .
	B172	96/17107	6/6/96	WO	C23C	16/44		
Examiner	<del></del>		<del></del>		Date Cons	idered		<del></del>
*E>< A 4 4 1 1 1 E E	1 - 10 - 1 15 -		Jl 4l	er not citation is in confe		MDED COO. D		



Sheet 15 of 18 sheet(s

U.S. Depart	Jse several sheets if necessary)  Examiner Unknown  oreign Patent Documents			ark Office	Docket No.		Serial No.		
(PTO Form	1449 mo	dified)			APPM/647:	RIED	10/074,898		
SUPPLEMENTAL LIST OF PATENTS AND PUBLICATIONS						Applicant		Confirmation No.:	
CITED BY	APPLICA	AN I	6	PE	YoodUet alt	2002	Unknown		
(Use severa	al sheets	if necessary)		A MOR W	TEEHINGLOSIE	CENIER 200	Group		
	Ex	caminer Unkno	own 🖳 👊	, Jennie de la company de la c	February 1	1, 2002	Unknown		
Foreign Pa	tent Doc	uments	Wet	CADEMARK	1 - Land Land	21			
*Examiner		Document	Date	Country	Class	Subclass	Translati	on	
Initial		Number					YES	NO	
	B173	96/18756	6/20/96	WO	C23C	16/08			
	B174	98/06889	2/19/98	WO	D06F				
	B175	98/51838	11/19/98	WO	C23C	16/06			
	B176	99/13504	3/18/99	WO	H01L	21/68		$\boxtimes$	
	B177	99/29924	6/17/99	WO	C23C	16/04			
	B178	99/41423	8/19/99	WO	C23C				
-	B179	00/11721	3/2/00	WO	H01L	29/43			
	B180	00/15865	3/23/00	WO	C23C	16/00			
	B181	00/15881 A2	3/23/00	WO	C30B				
	B182	00/16377 A2	3/23/00	WO	H01L				
	B183	00/54320A1	9/14/00	WO	H01L	21/44			
	B184	00/63957 A1	10/26/00	wo	H01L	21/205			
	B185	00/79019 A1	12/28/00	WO	C23C	16/00			
	B186	00/79576 A1	12/28/00	WO	H01L	21/205			
	B187	01/15220	3/1/01	WO	H01L	21/768			
	B188	01/15220 A1	3/1/01	WO	H01L	21/768			
	B189	01/27346 A1	4/19/01	WO	C23C	16/44			
	B190	01/27347 A1	4/19/01	WO	C23C	16/44			
	B191	01/29280 A1	4/26/01	WO	H01L	21/00			
	B192	01/29891 A1	4/26/01	WO	H01L	21/768			
	B193	01/29893 A1	4/26/01	WO	H01L	21/768			
	B194	01/36702 A1	5/25/01	WO	C23C	16/00			
	B195	01/40541 A1	6/7/01	wo	C23C	16/40			
	B196	01/66832 A2	9/13/01	WO	C23C	16/44			
	<del>                                     </del>								
Examiner					Date Cons	idered		<u> </u>	
						MDED 600: I	Trow line thro	ıah	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

2

U.S. Department of Commerce, Patent and Trademark Office						D	ocket NOECEIVED	Serial No.
(PTO Form 1449 modified)						Α	PPM/6473, 14, 2002	10/074,898
SUPPLEM CITED BY		LIST OF PATENTS	SAND	PUBLICA	TIONS	A	pplicant FECHNOLUGY CENTER oon, et al.	Confirmation No.:
(Use sever	ral sheet	s if necessary)		JUN 1	ਹਾ	F	ling Date	Group
		Examiner Unkno	wn	EL.	, Li	F	ebruary 11, 2002	Unknown
OTHER A	RT			TRAD	EMARK			
*Examiner Initial		Including Author, Ti			_			
	C1	Hultman, et al., "Review of the thermal and mechanical stability of TiN-based thin films", Zeitschrift Fur Metallkunde, 90(10) (Oct. 1999), pp. 803-813						
	C2	Klaus, et al., "Atomic Layer Deposition of SiO <sub>2</sub> Using Catalyzed and Uncatalyzed Self-Limiting Surface Reactions", Surface Review & Letters, 6(3&4) (1999), pp. 435-448						
	C3	Yamaguchi, et al., "Atomic-layer chemical-vapor-deposition of silicon dioxide films with extremely low hydrogen content", <i>Appl. Surf. Sci.</i> , Vol. 130-132 (1998), pp. 202-207						
	C4	George, et al., "Surface Chemistry for Atomic Layer Growth", J. Phys. Chem., Vol. 100 (1996), pp. 13121-131						
	C5	George, et al., "Atomic layer controlled deposition of SiO <sub>2</sub> and Al <sub>2</sub> O <sub>3</sub> using ABABbinary reaction sequence chemistry", <i>Appl. Surf. Sci.</i> , Vol. 82/83 (1994), pp. 460-467						
	C6	Wise, et al., "Diethyldiethoxysilane as a new precursor for SiO <sub>2</sub> growth on silicon", <i>Mat. Res. Soc. Symp. Proc.</i> , Vol. 334 (1994), pp. 37-43						
	C7	Niinisto, et al., "Synthesis of oxide thin films and overlayers by atomic layer epitaxy for advanced applications", <i>Mat. Sci. &amp; Eng.</i> , Vol. B41 (1996), pp. 23-29						
· · · · · · · · · · · · · · · · · · ·	C8	Ritala, et al.,"Perfectly conformal TiN and Al <sub>2</sub> O <sub>3</sub> films deposited by atomic layer deposition", Chemical Vapor Deposition, Vol. 5(1) (January 1999), pp. 7-9						
	C9	Klaus, et al., "Atomically controlled growth of tungsten and tungsten nitride using sequential surface reactions". Appl. Surf. Sci., Vol 162-163 (July 1999), pp. 479-491						
	C10	Klaus, et al., "Atomically controlled growth of tungsten and tungsten nitride using sequential surface reactions", Fifth Int'l Symp. On Atomically Controlled Surfaces, Interfaces and Nanostructures (July 6-9, 1999), Aix en Provence, France						
	C11	Min, et al., "Atomic layer deposition of TiN thin films by sequential introduction of Ti precursor and NH/sub3/", Symp.: Advanced Interconnects and Contact Materials and Processes for Future Integrated Circuits (Apr. 13-16, 1998), pp. 337-342						
	C12	Min, et al., "Metal-Organic Atomic-Layer Deposition of Titanium-Silicon-Nitride Films", Applied Physics Letters, American Inst. Of Physics, Vol 75(11) (Sept. 13, 1999)						
	C13	Maertensson, et al., "Atomic Layer Epitaxy of Copper on Tantalum", <i>Chemical Vapor Deposition</i> , 3(1) (Feb. 1, 1997), pp. 45-50						
••••	C14	Ritala, et al. "Atomic Layer Epitaxy Growth of TiN Thin Films", J. Electrochem. Soc., 142(8) (Aug. 1995), pp. 2731-737						
	C15	Elers, et al., "NbC15	as a prec	cursor in ato	mic layer epi	taxy", Ap	opl. Surf. Sci., Vol. 82/83	(1994), pp. 468-474
Examiner							Date Considered	

O\ID\$1449\_\_\_\_\_2.DOT



U.S. Depar	rtment o	f Commerce, Patent and Tr	ademark Office	Docket No.	Serial No.				
(PTO Form			APPM/6473	10/074,898					
		LIST OF PATENTS AND F	ApplicanEIVED	Confirmation No.:					
CITED BY	APPLIC	ANI	YoodUlatlat. 2002	Unknown					
Use sever	ral sheet	s if necessary)		Edilling Wate Enter 280	Group				
	I	Examiner Unknown	TRADEMARY	February 11, 2002	Unknown				
OTHER A	RT		RADEMA	Laborata Charles					
*Examiner Initial		Including Author, Title, Date, Pertinent Pages, Etc.							
	C16	Lee, "The Preparation of Titani Chemical Vapor Deposition, 5(		D Using Titanium Chlorides a	s precursors",				
	C17	Martensson, et al., "Atomic La 3, 5-Heptanedion ATE/H2 Prod	yer Epitaxy of Copper, Grow cess", J. Electrochem. Soc., 1	th & Selectivity in the Cu (II) 45(8) (Aug. 1998), pp. 2926-	-2,2.6,6-Tetramethyl- 2931				
	C18	Min, et al.,"Chemical Vapor D Symp. Proc., Vol. 564 (Apr. 5,		ith Alternating Source Supply	", Mat., Res. Soc.				
	C19	Bedair, "Atomic layer epitaxy	r epitaxy deposition processes", J. Vac. Sci. Techol. 12(1) (Jan/Feb 1994)						
	C20	Yamaga, et al., "Atomic layer epitaxy of ZnS by a new gas supplying system in a low-pressure metalorganic vapor phase epitaxy", J. of Crystal Growth 117 (1992), pp. 152-155							
	C21	Ohba, et al., "Thermal Decomposition of Methylhydrazine and Deposition Properties of CVD TiN Thin Films", Conference Proceedings, Advanced Metallization for ULSI Applications in 1993 (1994), pp. 143-149							
	C22	Scheper, et al.,"Low-temperature deposition of titanium nitride films from dialkylhydrazine-based precursors", Materials Science in Semiconductor Processing 2 (1999), pp. 149-157							
	C23	Suzuki, et al., "A 0.2- $\mu$ m contact filing by 450°C-hydrazine-reduced TiN film with low resistivity", IEDM 92-979, pp. 11.8.1 – 11.8.3							
-	C24	Suzuki, et al., "LPCVD-TiN Using Hydrazine and TiCl <sub>4</sub> ", VMIC Conference (June 8-9, 1993), pp. 418-423							
J	C25	IBM Tech. Disc. Bull. "Knowledge-Based Dynamic Scheduler in Distributed Computer Control, (June 1990), pp. 80-84							
	C26	IBM Tech. Disc. Bull. "Multiprocessor and Multitasking Architecture for Tool Control of the Advanced via Inspection Tools" (May 1992), pp. 190-191							
	C27	McGeachin, S., "Synthesis and properties of some β-diketimines derived from acetylacetone, and their metal complexes", Canadian J. of Chemistry, Vol. 46 (1968), pp.1903-1912							
	C28	Solanki, et al., "Atomic Layer deposition of Copper Seed Layers", Electrochemical and Solid State Letters, 3(10) (2000), pp. 479-480							
	C29								
	C30								
	C31	NERAC Search abstract of "Atomic Layer deposition of Ta and Ti for Interconnect Diffusion Barriers", by Rossnagel, et al., J. Vac. Sci. & Tech., 18(4) (July 2000)							
Examiner				Date Considered	,				
		if reference considered, wheth	or or not citation is in con-	formance with MPEP 609	Draw line through				



## RECEIVED

				INCOLITED			
U.S. Depa	rtment o	f Commerce, Patent and Trac	lemark Office	Docket NgUN   L 2002	Serial No.		
(PTO Forn	1449 n	nodified)	APPM/6473	│ 10/074.898			
		LIST OF PATENTS AND PU	Applicant TECHNOLOGY CENTER	Confirmation No.:			
CITED BY	APPLIC	CANT	OIPE	Yoon, et al.	Unknown		
(Use seve	ral sheet	s if necessary)	JUN 1 1 2002 B	Filing Date	Group ·		
	I	Examiner Unknown		February 11, 2002	Unknown		
OTHER A	RT		RADEMARK STORES				
*Examiner Initial		Including Author, Title, Date, P	ertinent Pages, Etc.				
	C32	Abstracts of articles re atomic	layer deposition				
	C33	Abstracts of search results re a	tomic layer deposition,	search dated January 24, 20	002		
	C34	Abstracts of articles re atomic	layer deposition and ato	mic layer nucleation			
	C35	Abstracts of articles re atomic layer deposition and semiconductors and copper					
	C36	Abstracts of articles – atomic layer deposition					
	C37	NERAC Search – Atomic Layer Deposition, search dated October 16, 2001					
	C38	Bader, et al., "Integrated Processing Equipment", Solid State Technology, Cowan Pub., Vol. 33, No. 5 (May 1, 1990), pp. 149-154					
	C39	Choi, et al., "The effect of annealing on resistivity of low pressure chemical vapor depositied titanium diboride", J. Appl. Phys. 69(11) (June 1, 1991), pp. 7853-7861					
	C40	Choi, et al., "Stability of TiB <sub>2</sub> as a Diffusion Barrier on Silicon", J. Electrochem. Soc. 138(10) (October 1991), pp. 3062-3067					
	C41	"Cluster Tools for Fabrication of Advanced devices" Jap. J. of Applied Physics, Extended Abstracts, 22 <sup>nd</sup> Conference Solid State Devices and Materials (1990), pp. 849 – 852 XP000178141					
187	C42	"Applications of Integrated processing", Solid State Technology, US, Cowan Pub., Vol 37, No. 12 (December 1, 1994), pp. 45-47					
	C43	Kitigawa, et al., "Hydrogen-mediated low temperature epitaxy of Si in plasma-enhanced chemical vapor deposition", Applied Surface Science (2000), pp. 30-34					
	C44	Lee, et al., "Pulsed nucleation for ultra-high aspect ratio tungsten plugfill", Novellus Systems, Inc. (2001), pp. 1-2 (COPY NOT AVAILABLE TO APPLICANT AT THIS TIME)					
				Data Carita at			
Examiner		if reference considered, whether		Date Considered			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.